

Supplemental Table. Lateralization (LI) differences from zero during mental planning and movement execution

a) Easy problems

	time (s)	all subjects (n=27)	95% CI	t-value	females (n=13)	95% CI	t-value ¹	males (n=14)	95% CI	t-value ¹	t-value ²
<i>Mental planning</i>	0	0.00 ± 2.24	-0.88 – -0.89	0.01	0.00 ± 2.00	-1.21 – -1.21	0.00	0.01 ± 2.52	-1.45 – -1.47	0.01	0.10
	1	0.09 ± 2.37	-0.85 – -1.03	0.20	0.45 ± 2.12	-0.83 – -1.73	0.76	-0.25 ± 2.61	-1.75 – -1.26	-0.35	0.75
	2	0.13 ± 2.57	-0.89 – -1.14	0.26	-0.16 ± 2.18	-1.47 – -1.16	-0.26	0.39 ± 2.94	-1.30 – -2.09	0.50	0.55
<i>Movement execution</i>	0	-0.15 ± 2.82	-1.27 – -0.96	-0.28	-0.77 ± 2.79	-2.45 – -0.92	-0.99	0.42 ± 2.84	-1.22 – -2.06	0.55	1.10
	1	-0.65 ± 2.79	-1.75 – -0.45	-1.21	-1.54 ± 2.31	-2.93 – -0.15	-2.41*	0.17 ± 3.02	-1.57 – -1.92	0.22	1.65
	2	-0.42 ± 2.87	-1.56 – -0.72	-0.76	-1.54 ± 2.45	-3.02 – -0.06	-2.27*	0.62 ± 2.93	-1.07 – -2.31	0.79	2.07*

b) Difficult problems

<i>Mental planning</i>	0	0.04 ± 2.60	-0.99 – -1.07	0.08	0.14 ± 2.16	-1.17 – -1.44	0.23	-0.05 ± 3.03	-1.80 – -1.70	-0.06	0.59
	1	0.39 ± 2.57	-0.63 – -1.40	0.79	0.16 ± 2.03	-1.07 – -1.39	0.29	0.60 ± 3.04	-1.16 – -2.36	0.74	0.32
	2	0.93 ± 2.56	-0.08 – -1.95	1.89	1.02 ± 2.39	-0.43 – -2.47	1.54	0.85 ± 2.80	-0.77 – -2.47	1.14	0.91
	3	1.42 ± 2.68	0.36 – -2.47	2.75*	1.19 ± 2.48	-0.30 – -2.69	1.74	1.62 ± 2.93	-0.07 – -3.31	2.07	0.57
	4	1.36 ± 2.87	0.22 – -2.49	2.45*	0.68 ± 2.34	-0.74 – -2.09	1.04	1.99 ± 3.25	0.11 – -3.87	2.29*	0.27
	5	1.06 ± 3.11	-0.17 – -2.29	1.78	0.15 ± 2.65	-1.45 – -1.75	0.20	1.91 ± 3.35	-0.03 – -3.85	2.13	0.45
<i>Movement execution</i>	0	0.20 ± 2.62	-0.83 – -1.24	0.40	-0.40 ± 2.74	-2.05 – -1.25	-0.53	0.76 ± 2.48	-0.67 – -2.20	1.15	1.16
	1	-0.16 ± 2.57	-1.18 – -0.86	-0.32	-0.87 ± 2.61	-2.45 – -0.71	-1.20	0.50 ± 2.45	-0.92 – -1.91	0.76	1.40
	2	-0.41 ± 2.96	-1.58 – -0.76	-0.72	-1.35 ± 2.96	-3.14 – -0.44	-1.65	0.47 ± 2.78	-1.14 – -2.07	0.63	1.65
	3	-0.08 ± 3.19	-1.34 – -1.18	-0.13	-1.07 ± 3.22	-3.01 – -0.88	-1.19	0.84 ± 2.98	-0.89 – -2.56	1.05	1.59
	4	-0.29 ± 3.31	-1.60 – -1.02	-0.46	-1.46 ± 3.25	-3.43 – -0.50	-1.62	0.80 ± 3.09	-0.99 – -2.58	0.97	1.86
	5	-0.47 ± 3.41	-1.82 – -0.88	-0.72	-1.67 ± 3.58	-3.84 – -0.49	-1.69	0.65 ± 2.94	-1.05 – -2.35	0.83	1.85

values are mean ±SD

*p<0.05

Abbreviations: 95% CI: 95% confidence interval; t-value¹: one sample t-test with zero as reference value; t-value²: independent sample t-test

with gender as between-subject factor